Application No.: 10/711,670

REMARKS

Present Status of the Application

Applicants thank the Examiner for the thorough examination of this application. However, claims 1-7 are rejected under 35 U.S.C. Section 112, 2nd paragraph, as failing to comply with the written description requirement. Claims 1, 2, 5-8 and 11-17 are rejected under 35 U.S.C. Section 103(a) as being unpatentable over Rittmueller et al. (U.S. Pat. No.6,016,346; hereinafter "Rittmueller") in view of Baumhauer, Jr. et al. (U.S. Pat. No.5,121,426; hereinafter "Baumhauer"). Claims 4 and 10 are rejected under 35 U.S.C. Section 103(a) as being unpatentable over Rittmueller and Baumhauer, and in view of Miller, II (U.S. Pat. No. 5,029,215; hereinafter "Miller").

Applicants have amended claims 1-2, 4-8, 10, 13-14 and 17 to more clearly define the present application. The amended claims are fully supported by the original specification of the present application without adding new matter. Specifically, Figs 2-3 of the present application, the first microphone module 222 and the second microphone module 224 face a group of people 244 at a predetermined direction, so that claims 1, 8, 14 are accordingly amended by adding the word, "at least a user" without introducing any new matter. After entry of the foregoing amendments, claims 1-2, 4-8 and 10-17 remain pending in the present invention, and reconsideration of those claims is respectfully requested.

Interview Summary

The undersigned would like to thank Examiner Lee for granting a telephonic interview on October 8, 2008, during which proposed amendments and the 35 USC 103 rejections were discussed. More particularly, the undersigned and the examiner discussed

Application No.: 10/711,670

the rejections and the teachings of the Rittmueller and Baumhauer references. After the

discussion, Examiner Ping Lee indicated the proposed amendments may define over the

prior art references if the claimed microphone module is unidirectional, otherwise a more

accurate definition of "facing a user" may be required.

Applicants are very grateful for the Examiner's suggestion. However, Applicants

respectfully submit that the definition of "facing at least a user" is clear, and the reasons

that motivate the above position of the Applicants are discussed in detail hereafter.

Discussion of Claim rejections under 37 U.S.C. Section 112

Claims 1-7 are rejected under 35 U.S.C. Section 112, 2nd paragraph, as failing to

comply with the written description requirement.

In response thereto, Applicants have amended claim 1 to cancel the recitations

"having multiple microphone ports" and "within each microphone port", so that the

rejections of claims 1-7 under 35 U.S.C. Section 112, 2nd paragraph, should be withdrawn

accordingly.

Discussion of Claim Rejections under 35 U.S.C. Section 103

Claims 1, 2, 5-8 and 11-17 are rejected under 35 U.S.C. Section 103(a) as being

unpatentable over Rittmueller in view of Baumhauer. Claims 4 and 10 are rejected under

35 U.S.C. Section 103(a) as being unpatentable over Rittmueller and Baumhauer, and in

view of Miller.

In response thereto, Applicants have amended claims 1, 8 and 14 to more clearly

define the present application, so that Applicants hereby otherwise traverse these

rejections. As such, Applicants respectfully submit that the present application as set

forth in claims 1-2, 4-8 and 10-17 is novel, non-obvious and patentable over Rittmueller, Baumhauer, Miller, or any of the other cited references, taken alone or in combination, and thus should be allowed.

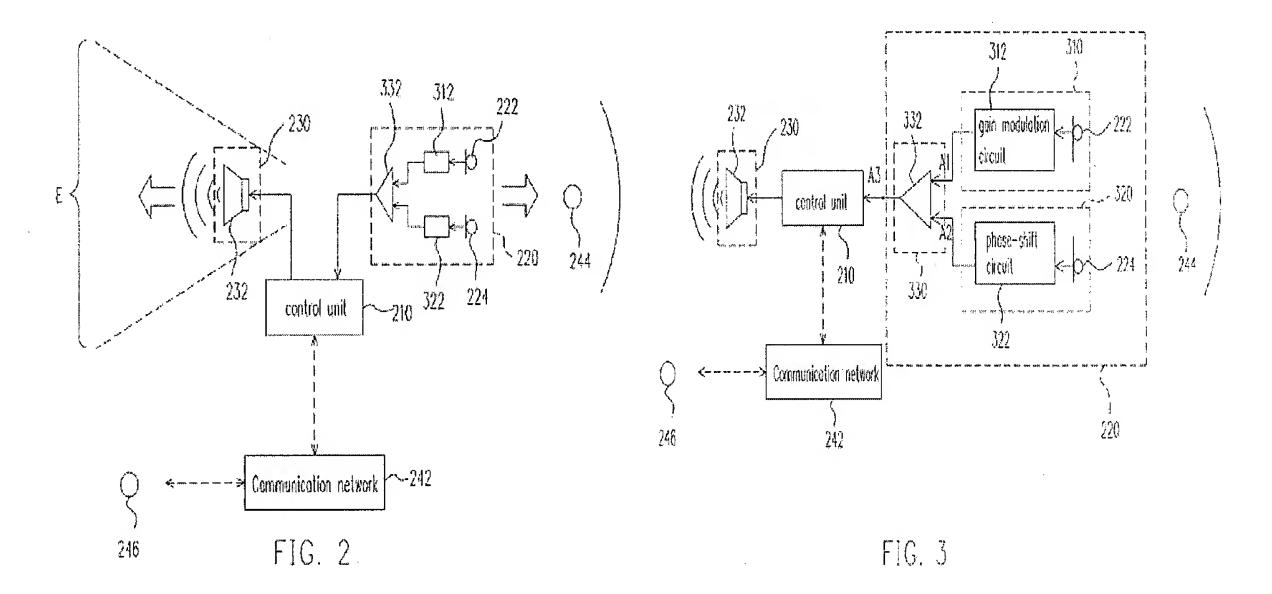
With respect to the currently amended claim 1, it recites in part below:

"A dual microphone module communication device for a teleconference system, comprising:

. . . ,

wherein the dual microphone module communication device is characterized in that the first microphone module and the second microphone module face at least a user at a predetermined direction" (Emphasis added)

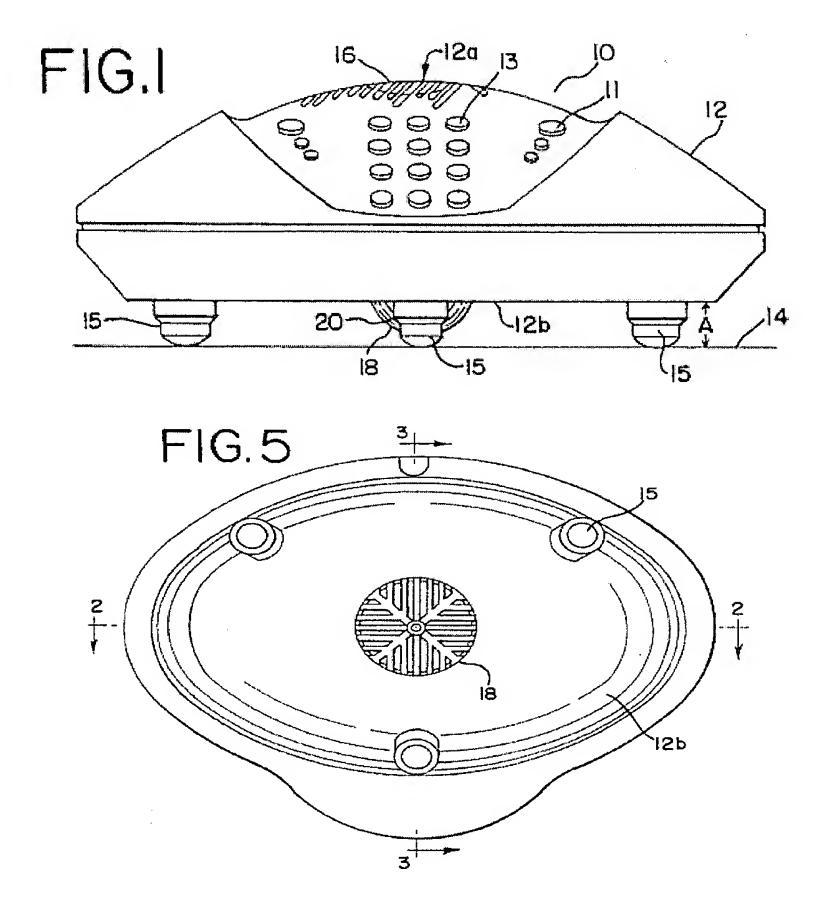
Please refer to FIGs. 2 and 3 of the present drawings as shown in below:



Applicants respectfully submit that the teleconference system of the present application adopts dual microphone (i.e. the first and the second microphone modules) to

array microphone, and the first microphone module and the second microphone would face at least a user at a predetermined direction for receiving the near-end audio signal produced by the user.

However, please refer to FIGs. 1 and 5 of Rittmueller as shown in below:



The speakerphone 10 of Rittmueller includes housing 12. The housing 12 has an upper surface 12a and a lower surface 12b, with respect to a support surface 14, such as a table top or other such hard surface (please see col. 3, lines 8-11). In addition, the housing

Application No.: 10/711,670

12 is divided substantially into an upper portion that contains a speaker and a lower

portion that contains a single microphone 20, wherein a microphone mounting cover

18 contains the microphone 20 (please see col. 3, lines 26-29).

It can be known, by one person having ordinary skilled in the art, that the

speakerphone 10 of Rittmueller does not adopt array microphone to receive a

near-end audio signal produced by user because the speakerphone 10 of Rittmueller

merely employs a single microphone 20. Moreover, the microphone 20 must face the

support surface 14, such as a table top or other such hard surface, rather than face

the user. Accordingly, the microphone is impossible to face the user.

Herein, Applicants respectfully submit that the technical schemes between

Rittmueller and the present application are different, and the microphone 20 of

Rittmueller does not face to the user. Therefore, Rittmueller does not disclose and read

on the features of "the first microphone module and the second microphone module face

at least a user at a predetermined direction" as set forth in the currently amended claim 1.

In addition, with respect to the currently amended claim 8, it recites in part below:

"A teleconference system, comprising:

. . . ,

an input module...;

• • • ;

wherein... the input module faces at least a user at a

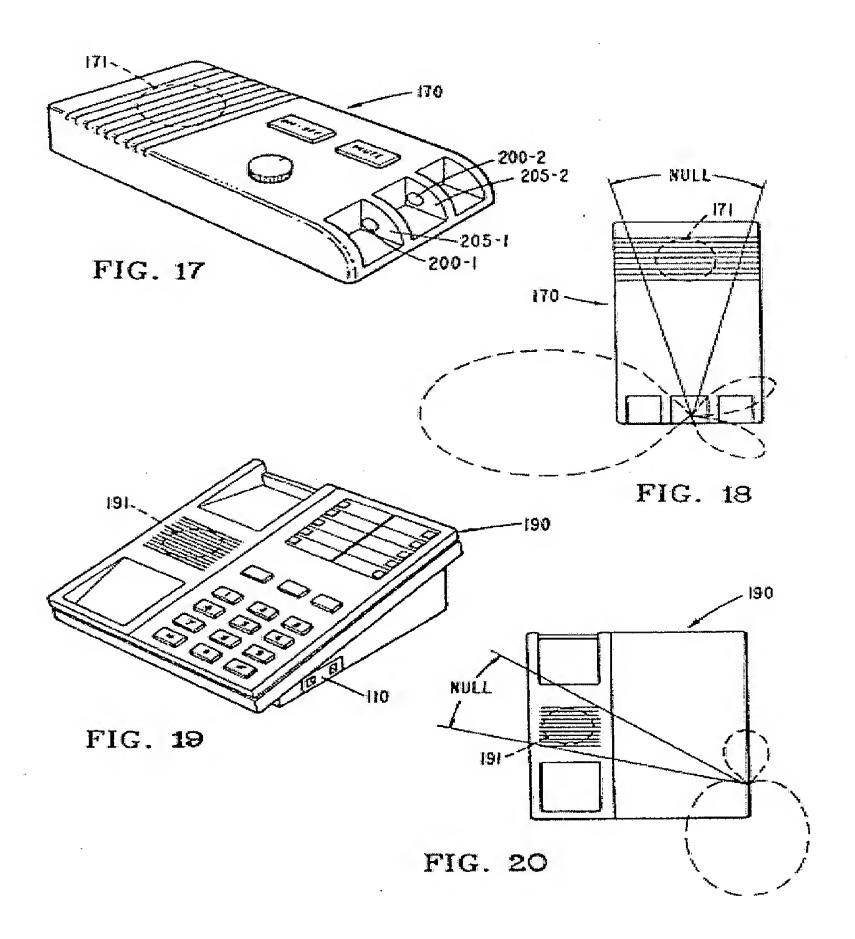
predetermined direction for receiving the near-end audio signal and the output

module faces a direction within a range just opposite to the predetermined

direction." (Emphasis added)

In the present application, the input module is opposite the output module. To be specific, the direction differences between the input module and the output module are 180 degree.

However, please refer to FIGs. 17 through 20 of Baumhauer as shown in below:



The loudspeaker 171 is not opposite the microphones 200-1 and 200-2 in Baumhauer. To be specific, the direction differences between the loudspeaker 171 and the microphones 200-1 and 200-2 are 90 degree. Similarly, the loudspeaker 191 is

Application No.: 10/711,670

not opposite the microphone housing 110 containing first-order-gradient microphone

elements such as shown in FIG. 3 of Baumhauer. To be specific, the direction

differences between the loudspeaker 191 and the first-order-gradient microphone

elements are also 90 degree.

Accordingly, Applicants respectfully submit that Baumhauer does not disclose

and read on the features of "the input module faces at least a user at a predetermined

direction... and the output module faces a direction within a range just opposite to

the predetermined direction" as set forth in the currently amended claim 8.

Furthermore, Applicants respectfully submit that Rittmueller does not

combine with Baumhauer, and Baumhauer does not modify Rittmueller to achieve

the technical efficiency of the currently amended claims 1, 8 and 14 because the

microphones 200-1 and 200-2 or the first-order-gradient microphone elements contained

in the microphone housing 110 as shown in FIG. 3 of Baumhauern are a bi-directional or

a tri-directional microphone, and Baumhauern has been disclosed that the

microphones 200-1 and 200-2 or the first-order-gradient microphone elements

contained in the microphone housing 110 face the user, the microphones 200-1 and

200-2 or the first-order-gradient microphone elements contained in the microphone

housing 110 would not receive any near-end audio signal produced by the user

(please see the dotted line circle in FIGs. 18 and 20 of Baumhauern).

Accordingly, if utilizing the microphones 200-1 and 200-2 or the

first-order-gradient microphone elements contained in the microphone housing 110 to

modify the microphone 20 of Rittmueller, it can be known that even through the

Application No.: 10/711,670

modified microphone 20 (i.e. the microphones 200-1 and 200-2 or the

first-order-gradient microphone elements contained in the microphone housing

110) of Rittmueller faces the user, the modified microphone 20 would not receive

any near-end audio signal produced by the user. Therefore, Rittmueller does not

combine with Baumhauer, and Baumhauer does not modify Rittmueller to achieve the

technical efficiency of the currently amended claims 1, 8 and 14. Accordingly,

Applicants respectfully submit that the definition of "facing at least a user" as set forth in

currently amended claims 1, 8 and 14 is clear and definite.

From the above, Applicants respectfully submit that since Rittmueller and

Baumhauer do not disclose and read on all of features as set forth in the currently

amended claims 1, 8 and 14, and Rittmueller does not combine with Baumhauer, and

Baumhauer does not modify Rittmueller to achieve the technical efficiency of the

currently amended claims 1, 8 and 14. Therefore, the currently amended claims 1, 8 and

14 are novel, non-obvious and patentable over Rittmueller, Baumhauer, Miller, or any of

the other cited references, taken alone or in combination, and thus should be allowed.

If an independent claim is non-obvious under 35 U.S.C. 103, then any claim

depending therefrom is non-obvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed.

Cir. 1988). As a result, claims 2 and 4-7 directly or indirectly depending upon the

allowable claim 1 should be allowed as a matter of law; claims 10 and 13 directly or

indirectly depending upon the allowable claim 8 should be allowed as a matter of law; and

claims 15-17 directly or indirectly depending upon the allowable claim 14 should be

allowed as a matter of law.

CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-2, 4-8 and 10-17 are in proper condition for allowance. If the Office believes that a telephone conference would expedite the examination of the above-identified patent application, the Office is invited to call the undersigned.

Respectfully submitted,

Date:

Jet. 16, 2008

Belinda Lee

Registration No.: 46,863

Jianq Chyun Intellectual Property Office 7th Floor-1, No. 100 Roosevelt Road, Section 2 Taipei, 100 Taiwan

Tel: 011-886-2-2369-2800 Fax: 011-886-2-2369-7233

Email: <u>belinda@jcipgroup.com.tw</u>

<u>Usa@jcipgroup.com.tw</u>